

WHAT IS CLAIMED IS:

1. An electromotive device used in an oil, said electromagnetic device comprising:

an outer casing;

a moveable shaft supported by said outer casing;

a bobbin disposed inside said outer casing so as to be disposed around said moveable shaft on a common axis with said moveable shaft; and

a coil embedded in an outer molding, said coil being constructed by winding a conducting wire onto said bobbin,

wherein said conducting wire is constituted by a copper wire, and an electrically-insulating layer coated on said copper wire, said electrically-insulating layer being composed of a material resistant to permeation by sulfur compounds.

2. The electromotive device according to Claim 1 wherein said bobbin and said outer molding are composed of a thermosetting resin.